JAN 27, 2005

Mr. Dawson Lasseter
Chief Engineer
Air Quality Division
Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, OK 73101-1677

RE: Holcim US, Inc. (Holcim)
Ada Portland Cement Plant
Ada, Pontotoc County, Oklahoma

Dear Mr. Lasseter:

This is in response to your letter dated December 6, 2004, requesting clarification of the appropriate methodology to calculate project emissions under the Prevention of Significant Deterioration (PSD) program for a proposed project at the Holcim Portland cement plant located in Ada, Oklahoma. Holcim is proposing to increase the amount of raw material used in the manufacture of cement by 20,000 tons per year to meet customer demands. At their request, Holcim met with Region 6 and the Oklahoma Department of Environmental Quality (via telephone) in Region 6 offices on December 17, 2004, to discuss the project. In addition, Holcim forwarded supplemental information to Region 6 on December 20, 2004.

Your request and the supplemental information explain that the proposed project at the plant includes the installation of new raw material handling equipment upstream of both kilns, and the installation of ports in the stationary hoods of both kilns to allow for the injection of additional raw material. Also, there will be an increase in material processed with existing equipment downstream of the kilns with no modification for this equipment.

In this case, the new or modified units would include the new upstream equipment and the two kilns which are being modified to install ports in the hoods to accommodate the additional feedstock material. The existing emissions units not being modified would include the equipment downstream of each kiln. These downstream units are integral and essential components of the cement manufacturing process. To illustrate, the proposed standards for hazardous air pollutants emissions for the Portland cement manufacturing industry explains that

"the ... cement manufacturing process consists of the following unit operations: (1) Grinding the carefully proportioned raw materials to a high degree of fineness; (2) firing the raw mix in a rotary kiln to produce clinker; (3) grinding the resulting clinker to a fine powder and mixing with gypsum to produce cement; and (4) raw and finished materials handling." Further, the section of the proposed standards which describes affected sources and emissions from these sources includes the downstream "Clinker Cooler" and "Finish Grinding/ Conversion of Clinker to Portland Cement" equipment. See Federal Register, March 24, 1998, Volume 63, Number 56, pages 14194, 14196, and 14197.

Your letter states that Holcim proposes to calculate emission increases from both upstream uncalcined material preparation equipment and downstream clinker handling and cement finishing and loading operations using an "increased utilization" methodology which would calculate actual emissions from the equipment after the modification as potential actual emissions.

Based on the data provided, the installation of the new equipment upstream of the kilns would clearly constitute a "physical change." Further, the installation of ports in the stationary hoods of the kilns would constitute "physical change" or "change in the method of operation" due to the physical modifications to install the ports, and the addition of raw material into the stationary hood area behind the burners, instead of in front of the burners. Regarding the downstream equipment, emission increases from these units are a direct result of the modification to the kilns to increase material processing, therefore, debottlenecking these units. As you know, emission increases subject to PSD applicability must include: (1) increases occurring at all new or modified units, and (2) any other increases, including debottlenecking increases, at existing emissions units not being modified which could experience emission increases that result from the change. The emissions increase is calculated by comparing each unit's future potential emissions to its past actual emissions.[1]

The unused capacity of the downstream equipment cannot be used by the facility in its current configuration without the proposed modification to the kilns. As this equipment could not operate at a level higher than that provided by the existing capacity of the kilns, any increase in actual emissions at the downstream units which will result from the increased capacity provided by modification of the kilns must be considered for the purposes of PSD applicability.[2]

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[1] See PSD regulations at 40 Code of Federal Regulations (CFR) 52.21(b)(21)(i) through (iv). See the Environmental Protection Agency (EPA) Memorandum, Request for Clarification of Policy Regarding the "Net Emissions Increase," John Calcagni, September 18, 1989.

[2] See letter from R. Douglas Neeley, EPA Chief, Air and Radiation Technology Section, Air Pesticides and Toxics Management Division, Region 4, to Rhonda Banks Thompson, Manager, Clean Air Implementation Section, Bureau of Air Quality South Carolina Department of Health and Environmental Control, March 14, 1997, and letter from Kathleen Henry, EPA Chief, Permits and Technical Assessment Branch, Region 3, to John M. Daniel, Jr. P.E., DEE, Director, Division of Air Programs Coordination, Department of Environmental Quality, Commonwealth of Virginia, October 23, 1998, and letter from Robert B. Miller, Permits and Grants Section, Air Programs Branch, Region 5 to Lloyd Eagan, Bureau of Air Management, Wisconsin Department of Natural Resources, February 8, 2000.

The downstream equipment has not begun normal operations under the proposed conditions and configuration; therefore, any emissions increase from the units must be determined by comparing the unit's future potential emissions to its past actual emissions.[3] To calculate any of the emission increases from the downstream units based on "increased utilization" is not appropriate here, as those units as currently configured could not increase their utilization due to the physical constraints of the kilns.

We concur with your evaluation that it is appropriate in this case to consider the increased emissions from the entire project in determining whether the increase is significant. See 40 CFR 52.21(b)(3)(i)(a) (defining "net emissions increase" to include "any increase . . . from a particular physical change or change in method of operation at a stationary source"). Also, we concur that the proper way of calculating the amount of the emissions increase from these units is to compare each unit's future potential emissions to its past actual emissions. See 40 CFR 52.21(b)(21)(ii), (iv).

We trust that our response to your request is helpful. Should you have any questions or require further assistance on this matter, please contact me at (214) 665-7250 or Rick Barrett of my staff at (214) 665-7227.

Sincerely yours,

David Neleigh
Chief
Air Permits Section

bcc: David Neleigh
6PD-R:x7250

[3] See 40 CFR 52.21(b)(21)(iv): For any emissions unit (other than an electric utility steam generating unit specified in paragraph (b)(21)(v) of this section) which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.